

Orbital order and spin relaxation in $\text{La}_{0.95}\text{Sr}_{0.05}\text{MnO}_3$

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Abstract

We analyze the temperature and angular dependence of the paramagnetic-resonance linewidth of $\text{La}_{0.95}\text{Sr}_{0.05}\text{MnO}_3$. The observed anisotropy can be well described by the crystal field contributions originated by the Jahn-Teller distortion. The critical behavior of the linewidth at the Jahn-Teller transition is found to be directly related with the orbital order.
